## Kata Baditzné Pálvölgyi (ELTE University, Budapest; <u>b.palvolgyi.kata@btk.elte.hu</u>): Melodic Peaks in the Spontaneous Speech of Vantage Level Hungarian Learners of Spanish

Prosodic stress is the result of the prominence given to a syllable compared to the rest of the syllables in the word (Hualde et al., 2010: 103) by means of changes in the fundamental frequency, intensity or duration with respect to its context (Quilis, 1999: 385).

Hungarian and Spanish stress systems are radically different in a sense that Hungarian, contrarily to Spanish, has a word-initial fixed position for lexical stress. In Spanish, the location of the stressed syllable is most typically the penultimate one (Delattre, 1965), but in lexical words it must fall on one of the last three syllables of the word (the Three Syllable Window Restriction, cf. Alcoba — Murillo, 1988: 153). This implies that for Hungarians learners of Spanish, this constitutes a challenging area of language acquisition, as only disyllabic Spanish words are typically stressed on their first syllables.

Former research has shown that stress in the oral production of even advanced level Hungarian learners of Spanish is in fact one of the most criticized areas by native Spanish speakers (Baditzné, 2019). As a possible trait of negative transfer, A2-B1 level Hungarian learners of Spanish often realize melodic peaks on the first syllables of lexical words even when in Spanish that syllable would receive no stress (Baditzné, 2018). The present study deals with the melodic characteristics of stressed syllables in the spontaneous speech of at least Vantage Level (B2 CEFRL) Hungarian learners of Spanish, in order to test whether advanced level Hungarian learners of Spanish still produce inadequate melodic peaks in their spoken Spanish. A corpus of 100 European Spanish and 100 Hungarian Spanish utterances was compiled and contrasted from the point of view of the melodic traits present in the supposedly stressed syllables. Both corpora consisted of spontaneous recordings with 16 speakers within a Map Task activity. The audio recordings in case of the Spanish corpus were obtained from the *Interactive Atlas of Romance Intonation* compiled by Prieto et al. (2010-2014), whereas the Hungarian informants were recorded in a soundproof room by Z. Gaál (ELTE University).

The method applied follows the *Prosodic Analysis of Speech* analysis (Cantero, 2019), and the theoretical background is based on Cantero (2002). According to him, intonation must be interpreted strictly as the succession of relevant F0 variations and it acts at three levels – the prelinguistic, the linguistic and the paralinguistic one. Marking stress by melodic means is part of the prelinguistic level of intonation. At the prelinguistic level, the only function of intonation is to segment speech into units, but it does not convey any additional meaning to the sentences. This level is the one responsible for 'foreign' accent. At the purely linguistic level, intonation contributes to the meaning of the utterance in a sense that it can express if it is interrogative, finished or emphatic. Other meanings such as 'irony' or 'rage' are not expressed only by intonational means, they pertain to the paralinguistic level of intonation and are complemented by other prosodic devices like duration or intensity.

This study deals with prelinguistic intonational phenomena such as the presence and the position of melodic peaks in utterances. A peak is a tonal movement in the melodic curve of at least 10% of rise with respect to the previous tonal unit (this is the Spanish threshold of perception according to Mateo — Font-Rotchés, 2011). In order to decide whether a tonal movement reaches this value, we must standardize the melodic curves, so that the contours can be objectively comparable.

Based on what has been exposed so far, the research questions of this study are whether, similarly to B1 students, (1) B2 level Hungarian learners of Spanish still transfer their Hungarian stress patterns to Spanish words, by giving melodic prominence to word-initial syllables, even if they are unstressed in Spanish; and if (2) B2 level Hungarian learners of Spanish realize Spanish stressed syllables with perceivable melodic prominence if the syllable is not word-initial.

In order to answer these questions, let us analyze the distribution of tonal peaks in both corpora.

	Spanish	Hungarian
peaks (total per 100 utterances)	246 (100%)	299 (100%)
peaks on pre-tonic syllables	27 (11%)	35 (12%)
peaks on tonic syllables	76 (31%)	93 (31%)
peaks on immediately post-tonic syllables	93 (38%)	120 (40%)
peaks in monosyllabic words	48 (20%)	51 (17%)
word-initial peaks on unstressed syllables in polysyllabic words	39 (16%)	33 (11%)

Table 1. The distribution of tonal peaks with respect to stressed syllables in both corpora

Not surprisingly, in Spanish, the typical peak position in an utterance coincides with the stressed syllable or with the one immediately following it. As we can see in Table 1, there are no considerable differences between the two corpora as far as the proportion of different peak locations with respect to the position of stress, because Hungarian learners of Spanish produced melodic peaks in almost the same proportion in each category as the native Spanish speakers did. This means that, contrarily to what has been attested in former research with B1 level Hungarian learners of Spanish (Baditzné, 2018), Spanish melodic stress patterns are reproduced quite adequately in the case of B2 level students. Also, it is remarkable that the average values of tonal movements immediately to the stressed syllables practically coincide in the two corpora; statistical testing revealed no significant difference in the means, whereas the mean values of tonal movements from the stressed syllable to the immediately following one are even higher in case of Hungarian learners of Spanish (the two-sample two-tail t-Test assuming unequal variances was applied in both cases).

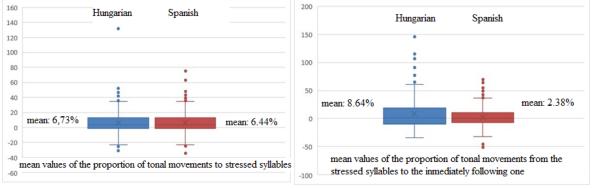


Figure 1. Boxplots of mean tonal movements to and from the stressed syllables, both corpora

Our results imply that in case of at least B2 level Hungarian learners of Spanish, stressed syllables are realized in the same way from the intonational aspect as in a native Spanish corpus. If Hungarian learners of Spanish sound odd to native Spanish speakers from the point of view of stress realization, it might not be because of inadequate melodic realization but rather because of other prosodic devices (such as intensity or duration) that may constitute an area of negative linguistic transfer.

Keywords: stress, melodic peak, language acquisition, Hungarian, Spanish

## References

- Alcoba, S. Murillo, J. (1998): Intonation in Spanish. In: Hirst, D. Di Cristo, A. (eds.) (1998): Intonation Systems. A survey of twenty languages. Oxford: University Press, 152-166.
- Baditzné Pálvölgyi, K. (2019): Magyar ajkú spanyol nyelvtanulók kiejtése spanyol anyanyelvűek szemével. XXVII. MANYE Kongresszus. Nyelv, kultúra, identitás. Alkalmazott nyelvészeti kutatások a 21. századi információs térben. KRE, Budapest, 2019. április 15-16. Absztraktfüzet, 44.
- Baditzné Pálvölgyi, K. (2018): La presencia de reasgos prelingüísticos en la entonación de la interlengua húngaro-española. *Colindancias 2018: 9*, 237-248.
- Cantero Serena, F. J. (2002): *Teoría y análisis de la entonación*, Barcelona: Ed. Universitat de Barcelona.
- Cantero Serena, F. J. (2019): Análisis prosódico del habla: más allá de la melodía, In: Álvarez Silva, M. R.; A. Muñoz Alvarado & L. Ruiz Miyares (eds.): *Comunicación Social: Lingüística, Medios Masivos, Arte, Etnología, Folclor y otras ciencias afines*. Volumen II. Santiago de Cuba: Ediciones Centro de Lingüística Aplicada, 485–498.
- Delattre, P. (1965): Comparing the Phonetic Features of English, German, Spanish and French. Heidelberg: Julius Groos Verlag.
- Font-Rotchés, D. Mateo Ruiz, M. (2011): Absolute interrogatives in Spanish: a new melodic pattern. *Actas do VII congresso internacional da ABRALIN*. Curitiba (Brasil), 2011. 1111-1125.

Hualde et al. (2010): Introducción a la lingüística hispánica. CUP.

- Prieto, P., et. al. (coords.) (2010-2014): Interactive Atlas of Romance Intonation. http://prosodia.upf.edu/iari/ [last consulted 12/02/2020]
- Quilis, A. (1999): Tratado de fonología y fonética españolas. Madrid: Ed. Gredos.